

*IN MEMORIAM*

**HENRY A. BESS**  
(1907–1992)

Henry A. Bess, Senior Professor Emeritus and international leader in biological control and population dynamics at the University of Hawaii at Manoa's College of Tropical Agriculture and Human Resources, passed away peacefully in Birmingham, Alabama, 15 October 1992. He had been retired since 1972 after 24 years of service.

Henry (as we knew him) was born in Newville, Alabama in 1907. His early education began in a humble one-room school. He then attended Auburn University (BS) and Ohio State University (Ph.D.). His entomological career began when he was awarded a National Science Foundation Scholarship to the University of California at Riverside. There, he became associated with Professor Harry S. Smith, one of the famous names in biological control. That job led to him to subsequently taking a position as a forest entomologist with the United States Forest Service in the northeastern United States and Canada. His contributions to our knowledge of the population dynamics of the gypsy moth and the application silvicultural practices for the suppression of forest pest populations are well known. At that time, the word "environment" was seldom heard and environmental concerns were nonexistent. Yet, Henry already had a gut-feeling that the excessive and careless use of pesticides could lead to serious environmental problems. He was a strong believer in applied ecology as a means to solve pest problems.

After 10 years with the U.S. Forest Service, Henry looked to the west and Hawai'i to new horizons. In 1948, when Dr. J.H. Beaumont, Director of the Hawaii Agricultural Experimental Station (now the College of Tropical Agriculture and Human Resources) offered him the position of Senior Professor and Chairman of the Department of Entomology. He happily accepted it and came to Hawai'i with his wife and 2 sons.

However, little did he realize that he had come to an institution where there was hardly an entomology department. It was a one-man department with two assistants all housed in one room. Still, this did not discourage Henry. He lost no time in building the department by convincing the University administration that a strong entomology department was absolutely necessary for the development of diversified agriculture in Hawai'i.

From its humble beginnings, the department grew exponentially due to the efforts of Henry Bess. Today, the department occupies nearly all six floors of the recently built Gilmore Hall. With a staff of more than 12 entomologists, it can be proud of its strong academic and research programs.

In Hawai'i, Henry studied the ecology of fruit flies and their natural enemies. His publications on the evaluation of the natural enemies of fruit flies are recognized as classics in the biological control literature. In addition, his evaluation of the natural enemies of pamakani and cactus, 2 serious weed pests of the Hawaiian rangeland, is internationally respected.

Just prior to his retirement, Henry developed an interest in termites that attack houses. He is best known for his long-term studies on the degradation rates of chemicals used for soil treatments. The fumigation of houses for dry wood termite control, first investigated by Henry in Hawai'i, is a standard practice today.

Henry was an effective teacher even though some considered his teaching philosophy unorthodox. He encouraged creative and philosophical thinking in his students. One of his famous questions was "If you place a toad in an ideal environment, will it move?" Questions such as this left students arguing among themselves long after the lectures were over. He enjoyed working with students helping them in their professional and personal development.

Henry was a member of a number of scientific organizations: Entomological Society of America, Hawaiian Entomological Society, Ecological Society of America, and Sigma Xi. He was a recipient of research grants from the National Science Foundation and Fulbright Exchange Program. These awards took him to international pest control projects in Japan, Taiwan, Thailand, Australia, Africa, Madagascar, the Philippines, and Sri Lanka.

In accordance with his request, his ashes were scattered at sea in front of the Elks Club in Waikiki. Thus, the elements of the ashes are now in the mineral cycle of the Hawaiian ecosystem; his spirit, however, continues to live in the hearts of those who knew him.

He is survived by his wife, Ina Ozeal; sons Dr. David Bess and Steve Bess; sister Melinda Carpenter; and 4 grandchildren. To them, we extend our condolences.

—Toshiyuki Nishida

## IN MEMORIAM



**RAY HERBERT GREENFIELD**  
(1911-1991)

Ray Herbert Greenfield was born in Takoma Park, Maryland on 9 June 1911. Schools that Ray attended were Takoma Park Elementary, Takoma Park, MD; Business High School, Washington, DC; and the University of Maryland, College Park, MD, with a BS in Biology in 1936. Ray was actually in the class of '35 but took a year off to travel in Mexico, and thus graduated a year later. Ray had actually attended class reunions for both years, as he had friends in both.

Ray met Ethel May Brennan on a Wanderbird Hiking Club (Washington, DC) outing in August 1940. They were married in Rockville, MD on 27 December 1941.

Ray acquired an interest in natural history early in his life, and by the time he was a member of the Boy Scouts in Washington, this interest was recognized by Dr. Paul Bartsch, Smithsonian curator of mollusks. In 1928, Ray accompanied Dr. Bartsch on a survey of land shells in Cuba. Then, in 1930, Ray participated in another Bartsch-led expedition to the southern Bahamas, islands off the south coast of Cuba, and the Caymans. Ray was one of the two scouts in the team of 5 investigators. This was a 4-month expedition, beginning in early June with the acquisition of the aged and leaky, 59-foot vessel, *Island Home*, which barely managed to carry them through the Bahamas and on to Cuba. After they reached Guantanamo on 11 August, naval authorities deemed the vessel unseaworthy, but Dr. Bartsch was able to charter the 35-ton sailing bark, *Jose Enrique*, which became their new base of operations. The expedition was a great success, with good collections from many islands, including many species new to science, resulting in some 250,000 mollusks, 925 bird skins, 596 reptiles, plus some mammals, fish, insects, and

marine invertebrates; also 22 live iguanas were successfully mailed from Cuba to the Washington Zoo. As a result of the field work, Ray was honored by having a shrimp named after him.

Ray's early jobs included summer assignments with the US Forest Service, which concentrated on pine tree blight. During World War II, Ray enlisted in the US Navy and became a Pharmacist's Mate. That was followed by a position in the National Institutes of Health in Bethesda, MD. There, Ray learned about a plant quarantine position in Hawai'i; he subsequently got the position, and then came to Hawai'i on a troop ship in April, 1945. Ray continued with the US Department of Agriculture, Animal and Plant Health Inspection Service as a quarantine officer until retirement in August 1976.

Employment in the federal government was ideal for Ray, because he took his 30 days of leave with accumulations and leave without pay every other year to exotic places around the world; almost everywhere except the interior of Africa.

In the mid 1970s, Ray visited the J. Linsley Gressitts in Wau, at the (then) Bishop Museum New Guinea Field Station (now Wau Ecology Institute). Ray had made regular contributions to the Institute and to Entomology at Bishop Museum, and later joined the technical staff at the Museum as a volunteer. Ray's period at the museum was punctuated by many trips, some of which had cinematographic documentation, and on one occasion, Ray gave an interesting lecture at the Bishop Museum Planetarium on his travels to the Philippines. During these latter trips, Ray also collected insects for Bishop Museum; these accessions amounted to several thousand specimens from mainly the Philippines, Thailand, Australia, Spain, Peru, Columbia, and the Dominican Republic. Other accessions include botanical and anthropological items, as well as miscellaneous lots of arthropods. One of the mementos that Ray brought back with him was a tiny owl-faced monkey, Lola, which lived for 10 years in the Greenfield's banana patch at their Kalihi Valley residence. Mrs. Greenfield had a ready answer to those who wondered why Ray didn't take his wife along on these jungle trips; she simply quoted Ray, "Why, I would have to hire an extra mule just to carry her food!"

Unfortunately, Ray's jungle trips were to have a serious side-effect fairly early in Ray's career. When he was only 20, Ray got malaria in Mexico, and the strong medication used in those times produced an "uneven" heart beat thereafter. In 1988, Ray made an enjoyable trip to the Dominican Republic, and made a return trip there in 1989 following an environmental conference in Maryland. Ray knew that his heart was not so good but his doctor said, "Go!" Ray would have preferred to die on a trip and not in a nursing home, anyway. On this trip, Ray and his Dominican friend made several field excursions but after a few days, Ray experienced chest pains and was air-evacuated to Florida, where he was eventually taken to Orlando. On 27 June 1989, Ray had a triple-bypass operation, and recuperated in Orlando until September, when Ethel flew over to bring him home to Honolulu. Sadly, Ray never regained his strength, and he was usually restricted to a wheelchair. That, however, did not keep the Greenfields from enjoying their many friends and going out to restaurants and celebrations. In June 1989, Ray's 79th birthday was celebrated at the NCO Club at Fort Shafter, attended by many of Ray's friends from Bishop Museum. The Greenfields attended the Bishop Museum Bug Ball (Christmas party) in 1989 where they won a pair of United Airlines round trip tickets to the mainland. In January 1991, Ray's condition worsened and he was taken to Queen's Hospital, where he passed away on 3 June 1991, just 6 days short of his 80th birthday. Ray had willed his remains to the University of Hawaii Medical School.

To his many acquaintances, Ray was a modest but generous man who was deeply concerned over the rapid destruction of native ecosystems, especially in the tropics. Ray traveled to many such areas in the world to experience them first-hand. Ray gave

unselfishly of his time following his retirement, providing volunteer services to the Waikiki Aquarium, as well as to Bishop Museum. He was also staunch supporter of many environmental and human causes, and often together with Ethel, made financial contributions to many organizations over the long term. Memberships included the Audubon Society, Bishop Museum Association, Defenders of Wildlife, Hawaiian Entomological Society, Nature Conservancy, Sierra Club, Smithsonian Associates, and World Wildlife Fund.

Ray is survived by his wife, Ethel May Greenfield, of Honolulu, and an older brother, H. Richard Greenfield, of Baltimore, MD.

—G.A. Samuelson